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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/530,318

04/20/2006

Ulrich Oppelt

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KENYON & KENYON LLP
ONE BROADWAY
NEW YORK, NY 10004

EXAMINER

MEHMOOD, JENNIFER

ART UNIT

PAPER NUMBER

2612

MAIL DATE

DELIVERY MODE

12/28/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/530,318

Applicant(s)

OPPELT ET AL.

Examiner

Jennifer A. Mehmood

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 April 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 4/20/2006; 4/4/2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 12-15, 21, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Opitz et al. (US 2002/0135490) and further in view of Chen (US 6,501,502).

For claim 12, Opitz discloses a smoke detector, comprising: an image sensor (Fig. 2, item 13); and a light source (Fig. 2, item 14), wherein: the image sensor records a presence of smoke at a close distance (parags 0007; 0012). Opitz, discloses that the light source is matched or adjusted to the image sensor. Opitz, however, does not specifically disclose that the light source can be activated when ambient light is insufficient for the image sensor. Chen, however, discloses an image detection device where a light source is activated when ambient light is insufficient for the image sensor (col 1, lns 57-62; col 2, lns 48-55). It would have been obvious to one of ordinary skill in the art, at the time the invention was made to disclose a light source activated when ambient light is insufficient for an image sensor so that an image sensor receives an appropriate quantity of light in order to produce a clear image.

For claim 13, Opitz discloses the smoke detector recognizes an intensity of the ambient light based on a signal from the image sensor (parags 0013, 0014, 0027).

For claim 14, Opitz discloses an ambient light sensor for measuring an intensity of the ambient light (parags 0013, 0014, 0027).

For claim 22, Opitz discloses the image sensor generates a reference image for subsequent comparisons at specified times (parags 0006, 0022, 0023, 0026).

3. Claims 15 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Opitz et al. (US 2002/0135490) and Chen (US 6,501,502), and further in view of Hansman, Jr. et al. (US 5,313,202).

For claim 15, Opitz does not specify monitoring the image sensor at a specific distance. However, Hansman discloses monitoring an image sensor at a distance of 5-20cm (col 5, lns 43-53; Fig. 4, item 320). It would have been obvious to monitor an image sensor at a distance of 5-20cm so that a very accurate, close-up image is produced.

For claim 21, Opitz discloses an optical system, but does not disclose focusing on a focal point about 10 cm on the cover. However, Hansman discloses focusing on a focal point about 10 cm on the cover (col 5, lns 43-53; Fig. 4, item 320). It would have been obvious to disclose a cover for the optical system disclosed by Opitz in order to protect the imaging device. In addition, it would have been obvious to disclose focusing on a focal point about 10 cm on the cover so that a very accurate, close-up image is produced.

4. Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Opitz et al. (US 2002/0135490) and Chen (US 6,501,502), and further in view of Anderson et al. (US 6,958,689).

For claim 16, Opitz discloses an image sensor, but not disposed in a labyrinth. Anderson, however, discloses a sensor disposed in a labyrinth (Fig. 6, item 82; col 7, lns 43-53). It would have been obvious to dispose the image sensor of Opitz within the labyrinth of Anderson in order to shield the image sensor from ambient light, thereby maximizing emission levels from the light to facilitate the rejection of noise such as excess amounts of ambient light.

For claim 17, Opitz discloses a light source, but does not disclose a light-emitting diode (LED). Anderson, on the other hand, discloses an LED (Fig. 6, items 80 and 84; col 7, lns 56-59). It would have been obvious to include at least one LED for testing proper operation of the smoke detector.

5. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Opitz et al. (US 2002/0135490) and further in view of Gow (US 6,097,279).

Opitz does not disclose a mounting arrangement for the detector; however, Gow discloses an arrangement for mounting a detector flush on one of a wall and a ceiling (col 1, lns 54-60; col 3, lns 17-20). It would have been obvious to flush mount the smoke detector of Opitz within a wall or ceiling in order to disguise and protect the internal components of the detector.

6. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Opitz et al. (US 2002/0135490) and further in view of Yulkowski (US 6,049,287).

Opitz discloses a camera, but does not specifically disclose a miniature camera; however, Yulkowski discloses a miniature camera (Fig. 5, item 72; col 5, lns 5-10). It would have been obvious to reduce the size of the camera disclosed by Opitz to a

miniature camera as disclosed by Yulkowski so that the camera is operational while in a small space.

7. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Opitz et al. (US 2002/0135490) and Chen (US 6,501,502), and further in view of Lehman et al. (US 6,150,943).

Opitz does not disclose a field of vision of the image sensor; however, Lehman discloses a field of vision of the image sensor one of points downward and points at an angle toward a side from a detector cover (Fig. 4, items 46, 47, 48; Fig. 9; col 5, lns 59-67). It would have been obvious to disclose the field of vision of the image sensor, disclosed by Opitz, pointing downward and at an angle toward a side from a detector cover so that the image sensor of Opitz will pick up an image of a person for surveillance and security purposes

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Marman et al. (US 2006/0261967), Rattman et al. (US 4,614,968), Sadok et al. (US 7,256,818), and Endo et al. (US 6,078,040) disclose a smoke detector with an image forming surface and a light source.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A Mehmood whose telephone number is (571) 272.2976. The examiner can normally be reached on M-F from 8:00am to 4:30pm.

Application/Control Number:
10/530,318
Art Unit: 2612

Page 6

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Daniel Wu, can be reached at (571) 272.2964. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jennifer A. Mehmood
December 12, 2007


BENJAMIN C. LEE
PRIMARY EXAMINER